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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/800,814	03/07/2001	Tetsuya Yashiki	OAC-009	5757
959	7590	05/06/2004	EXAMINER	
LAHIVE & COCKFIELD, LLP. 28 STATE STREET BOSTON, MA 02109			BANGACHON, WILLIAM L	
			ART UNIT	PAPER NUMBER
			2635	

DATE MAILED: 05/06/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/800,814

Applicant(s)

YASHIKI ET AL.

Examiner

William Bangachon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/6/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings were received on 2/6/04. These drawings are acceptable.
2. Objection to the drawings under 37 CFR 1.83(a) in the last Office action is withdrawn.

Response to Arguments

3. Applicant's arguments have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "the Berra reference does not teach rewriting of the serial identification code, first password A or second password B" [page 6, 2nd paragraph]) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In this case, the claims are broader than what applicant argues. The claims recite, "**rewriting of security data**". The Berra reference teaches rewriting/reprogramming of vehicle computer systems/software routines for authorized users {col. 4, lines 5-16, lines 25-27; col. 7, lines 40-44; col. 8, lines 29-37}. And that "the system of Berra prevents undesirable or unintended

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programming of vehicle controls which could lead to potentially adverse affects on performance on the vehicle" {col. 8, lines 37-40}. Obviously, the vehicle computer systems/software routines of Berra are security data because the routines is intended to be protected from inadvertent programming, to one of ordinary skill in the art.

In response to applicant's argument that "the Funakoshi and Onuma references does not teach a vehicle controller having a rewritable memory for storing first security data used to determine whether rewriting to the rewritable memory is permitted" (page 6, last paragraph; page 7, 1st paragraph), a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). In this case, the examiner respectfully traverse applicants arguments that "the Funakoshi and Onuma references does not teach a vehicle controller having a rewritable memory {Funakoshi, col. 5, lines 16-22; col. 6, lines 27-37} for storing first security data used to determine whether rewriting to the rewritable memory is permitted {Funakoshi, col. 8, line 63-col. 9, line 12} {Onuma, col. 6, lines 30-49}" (page 6, last paragraph; page 7, 1st paragraph).

The examiner respectfully traverses applicant's arguments that the Funakoshi reference does not receive new security data from an external rewriting device (page 7,

2nd paragraph). In this case, the KEY=KEYCHK is always new security data, generated that is generated randomly {Funakoshi, col. 9, lines 4-13}.

The examiner respectfully traverses applicant's arguments that "the Funakoshi reference is not concerned with rewriting to a rewritable device" (page 7, lines 24-27) in that the Funakoshi teaches that the security device is also possibly constructed as a diagnoses device or a reprogramming tool {Funakoshi, col. 4, lines 10-23}.

Finally, the examiner respectfully traverses applicant's arguments that "the rolling code feature of the Onuma reference takes place completely within the confines of the vehicle and is not transmitted to an external rewriting device or received from an external rewriting device" (page 8, lines 2-4). In this case, the external rewriting device is a key as shown in figure 1 of Onuma.

Based on above response, rejection to the claims is maintained in this Office action.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,783,367 (Berra) in view of US 6,401,207 (Funakoshi et al) and US 5,945,906 (Onuma).

In claims 1, 6-7, and 10, Berra teach of a vehicle controller (12) comprising a rewritable memory (38, 40) for storing first security data used to determine whether rewriting to the rewritable memory is permitted {col. 3, lines 19-35};

wherein the vehicle controller is configured, in response to receipt of new security data from an external rewriting device (30, 32, 26) to delete the first security data, and to write the new security data into the rewritable memory {col. 5, lines 39-50; col. 6, lines 4-33}.

Berra does not disclose expressly writing a new security data into the rewritable memory.

Funakoshi teach of creating a new security data each time a security device of a vehicle is used and writing the new security data in memory {Funakoshi, col. 8, lines 15-49} for the purpose of enhancing the security level of the vehicle security device {Funakoshi, col. 2, lines 7-12; col. 9, lines 3-12}. Clearly, these features are desirable in the system of Berra because the security data is changed all the time and will not allow code grabbers to operate the vehicle. The systems of Berra and Funakoshi are analogous art because they are from same field of endeavor, reprogramming of a vehicle control systems. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to write new security data in the system of Berra because this enhances the security level in a vehicle by constantly changing the security data, as evidenced by Funakoshi.

Further, Onuma teach of a rolling code applied to a vehicle antitheft system wherein the rolling code is an identification code changed each time the engine is stopped and stored in the memory (31) of the vehicle immobilizer unit (analogous to "in response to receipt of new security data from an external rewriting device to delete the first security data, and to write the new security data into the rewritable memory")

{Onuma, col. 4, lines 20-46}. Obviously, the use of the rolling code enhances the security of the system because the identification code is changed each time the engine is stopped and would deter would be code grabbers from copying the previous identification code and using the previous identification code to operate the vehicle. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to use rolling code in the system of Berra, as evidenced by Onuma, because the identification code is changed each time the engine is stopped and would deter would be code grabbers from copying the previous identification code and using the previous identification code to operate the vehicle.

In claim 2, the vehicle controller of claim 1, wherein the program for deleting the first security data and writing the new security data is stored in a non-rewritable memory {Berra, paragraph bridging cols. 5 and 6}.

In claim 3, the vehicle controller of claim 1, wherein an anti-theft system is connected to the vehicle controller {Funakoshi, col. 11, lines 11-17}; and

wherein rewriting to the rewritable memory is permitted if the anti-theft system permits an operation as to the vehicle {Funakoshi, col. 11, lines 25-33}.

In claim 4, the vehicle controller of claim 1, wherein the rewritable memory is implemented in any form of a flash memory, EPROM and EEPROM {Funakoshi, col. 8, lines 27-28; Berra 40}.

In claim 5, the rewritable and non-rewritable memory is implemented in a single memory {Funakoshi, col. 8, lines 27-28; Berra 40}.

In claim 8, the rewriting device of claim 6, further comprising a user interface that enables a user to create the new security data {Funakoshi, col. 7, lines 18-22}.

In claim 9, the rewriting device of claim 6, wherein the controller is further configured to assemble serial data blocks from the new security data {Berra, col. 4, lines 16-36}; and

wherein the communication means transfers the serial data blocks via serial communication {Berra, 20, 24}.

Claims 10-13 and 17 recites the combination of a vehicle controller in claims 1-3 and the rewriting device of claims 6-9 and therefore rejected for the same reasons.

Claim 14 recites, "comparing the first and second security data, and if there is a match, rewriting to rewritable memory is permitted." {Funakoshi, col. 9, lines 1-3, lines 25-30; Onuma, col. 4, lines 34-46, col. 7, lines 11-26}.

Claim 15 recites the calculation of a first function value for a number based on the first security data and a second function value based on the second security data,

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compare the first and second function values, and if there is a match, rewriting to rewritable memory is permitted {Funakoshi, col. 8, lines 15-50; col. 9, line 54-col. 10, line 11}.

Claim 16 recites the number as being generated from random numbers in the vehicle controller {Funakoshi, col. 10, lines 55-59}.

Claims 18-22 recites a method for practicing the memory rewriting system of claims 10-17 and therefore rejected for the same reasons.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Examiner Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Bangachon whose telephone number is 703-305-2701. The examiner can normally be reached on 4/4/10.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703-305-4704. The fax phone numbers for the organization where this application or proceeding is assigned is 703-872-9314 for regular and After Final formal communications. The examiner's fax number is 703-746-6071 for informal communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

William L Bangachon
Examiner
Art Unit 2635

May 3, 2004

MICHAEL HORABIK
SUPERVISORY PATENT EXAMINER
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